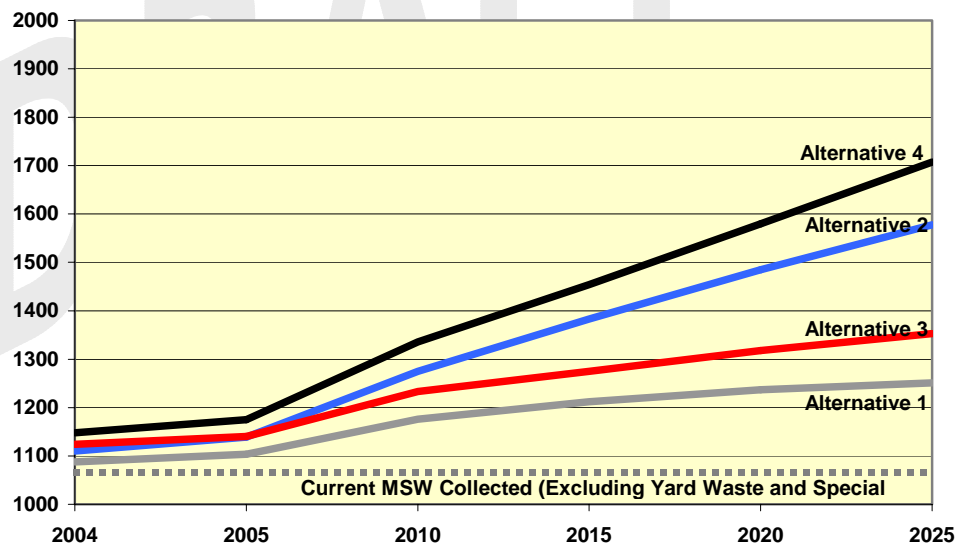


projection alternatives (described in detail in Appendix B). These MSW collection projections do not include yard waste and special wastes. **(Note that these projections assume the continuation of the county's current management practices and conditions.)** The county projects that the annual quantities of MSW collected in Fairfax County will increase between 17 and 58 percent from 2004 to 2025.

Table 6-9. MSW Collection Projections (Excluding Yard Waste and Special Wastes) in Fairfax County, 2003–2025 (in thousands of tons)

Calendar Year	Alternative 1		Alternative 2		Alternative 3		Alternative 4	
	MSW Recycling	MSW Disposal	MSW Recycling	MSW Disposal	MSW Recycling	MSW Disposal	MSW Recycling	MSW Disposal
2004	256	819	262	828	265	816	271	824
2005	260	844	269	870	269	871	278	897
2010	297	879	323	952	312	921	339	997
2015	326	886	375	1,008	344	931	395	1,059
2020	333	904	403	1,082	356	962	430	1,150
2025	337	914	429	1,149	366	987	466	1,241

Figure 6-3. MSW Collection Projections (Excluding Yard Waste and Special Wastes) in Fairfax County 2003–2025 (in thousands of tons)



**Fairfax County's MSW collection system (excluding yard waste and special wastes) must handle an additional 163,000 to 559,000 tons per year by 2025**

The county projects that the current MSW collection system (excluding yard waste and special wastes) must handle an additional 163,000 to 559,000 tons per year by 2025. Therefore, the existing collection system will have to expand, by adding rolling stock and labor, to meet the increased quantities.

## SWMP Actions

Table 6-10 shows Fairfax County' SWMP actions for the collection of MSW. The county selected SWMP actions based on their alignment with the SWMP objectives (in Chapter 4) and their ability to close the gaps between the county's current SWM system and that required in the future. These SWMP actions are discussed in more detailed in Chapter 11.

Table 6-10. Fairfax County MSW Collection SWMP Alternatives

MSW Collection SWMP Alternatives
County oversees residential collection services through contracts with private companies
Revise County Code to reflect residential service level changes and requirements
Promote use of special fuels, filters, and special vehicles for collection

## Transfer

**Fairfax County transfer facilities include the I-66 Transfer Station and three privately-owned MRFs**

Fairfax County utilizes a single transfer station for handling waste materials, including MSW, known as the I-66 Transfer Station. There are also three MRFs in the county for handling MSW recyclables, which are discussed earlier in this chapter.

### I-66 Transfer Station

Fairfax County operates a single transfer station, the I-66 Transfer Station, which is regulated under VDEQ Permit #387. The facility accepts, from public and private haulers operating throughout the county, MSW, yard debris, brush, CDD (from small businesses and homeowners), and white-goods for transfer or processing. In addition, the county also operates a disposal collection facility for citizens and businesses at the I-66 Transfer Station that accepts residential MSW directly. (Above, see "Collection," "Disposal Centers.") The facility is located near the center of the county, at the site of the closed I-66 Landfill.



The I-66 Transfer Station has two main objectives: (1) managing MSW quantities disposed of at the E/RRF, and (2) minimizing solid waste disposal transportation requirements.

The operation of the E/RRF requires a constant feed of MSW, so Fairfax County must provide it with a contracted amount (930,750 tons annually). By consolidating the majority of MSW collection and transfer at the I-66 Transfer Station, the county is able to control the MSW volume delivered to the E/RRF. If MSW quantities entering the system are greater than the E/RRF processing capacity, then the county can transport the "overflow" waste from the transfer station to sanitary landfills outside of the county.

The I-66 Transfer Station also enables the county to reduce MSW disposal transportation requirements, primarily for private and municipal haulers. First, haulers have the option of using the I-66 Transfer Station or hauling waste directly to the E/RRF, whichever provides the most convenient transportation solution. Typically, haulers in the northern and western portions of the county use the transfer station; others haul directly to the E/RRF.

Second, the county consolidates typically three to five smaller truckloads into a single trailer for transportation to the E/RRF and out-of-county landfills. Consolidation at the transfer station enables the county to reduce the truck traffic to the E/RRF.

The I-66 Transfer Station commenced operations in January 1983. In early 1991, the county began planning the expansion of the original transfer station, including a new area for residential recycling and disposal. The multi-year project cost approximately \$13.1 million and included the expansion of the number of disposal bays, as well as repairs to the original transfer station building. This project included the completion of the recycling and disposal facility in 1993 and the tipping building expansion in 1997.



**The I-66 Transfer Station charges fees based upon the amount of MSW disposed**

The I-66 Transfer Station charges fees based upon the amount of MSW disposed. The fees vary based upon the type of waste and the category of the disposer. Haulers that enter into a contract with the county and meet specific eligibility requirements (such as obtaining proper county permits) are currently charged a lower fee. All fees finance the transport and disposal of the refuse at the E/RRF or landfill as well as costs for administration and other community benefit programs, such as recycling and household hazardous waste.

The facility operates with 52 transfer vehicles, 74 drivers, other operations staff, and contract hauling support. Drivers typically work on rotating shifts 10 hours a day for 4 days a week.

### **Vehicle Processing**

Incoming vehicles to the transfer station may include private haulers, municipal haulers, commercial cash customers, and residents.

#### *Private and Municipal Haulers*

All trash hauling vehicles entering the transfer facility have permits from Fairfax County. The permit types vary according to the size of the hauling company, with large hauling companies invoiced monthly. The county requires hauling companies that are billed monthly to obtain a security

**Incoming vehicles to the transfer station may include private haulers, municipal haulers, commercial cash customers, and residents**

bond to cover outstanding debt and failures to perform waste collection requirements.

Each entering trash hauling vehicle must display its unique permit number. Upon entering, the facility retrieves information from the computer scale system, including tare weight and owner name and address. All trash hauling vehicles are weighed on an electronic scale, which records the date, time, weight, and charge. The system prints a waste receipt, including the vehicle owner's name and address, and the type of waste. The system tracks charges and bills owners monthly.



The I-66 Transfer Station is open for private and municipal haulers Monday through Friday from 5 A.M. to 6 P.M. and Saturdays from 5 A.M. to 2 P.M. The peak hours for incoming vehicles are 4 P.M. to 5 P.M. Other peak volumes are from 11 A.M. to 1 P.M. and 7:30 A.M. to 9 A.M.

#### *Commercial Cash and Citizens*

Small companies that do not desire a monthly invoice and generate waste as part of their regular work (landscaping, roofing or remodeling businesses, for example) may pay cash for disposal services (commercial cash program). They pay either a flat fee per visit or by weight for larger loads.

Residents of the county who use the facility pay for disposal on the basis of the number of bags (for smaller loads), by weight (for larger loads), or by item (white goods, tires). The county uses revenue from the operation of this program to fund the solid waste management program. The disposal center for citizens and commercial cash customers at the I-66 Transfer Station is also open Sundays, and has slightly different operation hours than the hours for collection and disposal vehicles.

#### **Refuse Handling**



After processing at either the main scales or commercial cash/citizens scales, the vehicles are directed to one of the 21 bays to discharge the waste (10 bays in one building and 11 bays in the adjacent building). Waste is emptied from the vehicles onto the floor of the bay; county operators in front-end loaders inspect the waste and move it toward the pits at the back of the bays. This type of facility is known as a direct-discharge non-compaction station.

Vehicles are randomly screened for prohibited wastes, including regulated medical waste (RMW) and hazardous wastes. Crane operators and other employees continuously screen refuse in the bays.

Waste is loaded into the waiting 18-wheel tractor-trailers beneath the floor through one of the six pits at the back of the bays. Cranes behind the pits assist in directing the waste into the trailers.

### Outgoing Vehicles

After discharging their wastes, all vehicles leave the facility.

### Transfer Operations

Once the transfer trailers are loaded, they pull out of the facility; the operator removes loose or hanging refuse from the trailer, closes the trailer top, and proceeds to the E/RRF or landfill. County vehicles are typically weighed when they arrive at the disposal facility rather than at the I-66 Transfer Station; drivers, however, may weigh their vehicles at the transfer station if they believe the load may be too heavy.

In 2002, the I-66 Transfer Station accepted 663,819 tons of material. The average daily refuse received was approximately 2,100 tons (based on operations 6 days per week). Table 6-11 shows the quantities of MSW received at the I-66 Transfer Station and destination for disposal from 2000 to 2002.

*Table 6-11. I-66 Transfer Station, Tons of MSW Transferred, 2000–02*

Category	2000	2001	2002
Inbound MSW			
Haulers	579,437	646,298	635,825
Disposal for citizens	30,556	26,526	27,994
Outbound MSW			
E/RRF	560,965	595,853	628,348
Out-of-county landfills	49,028	76,971	35,471
<b>Total</b>	<b>609,993</b>	<b>672,824</b>	<b>663,819</b>

**Roughly 75 percent of MSW destined for disposal in Fairfax County flows through the I-66 Transfer Station**

Most (roughly 75 percent) MSW destined for disposal in Fairfax County flows through the I-66 Transfer Station. MSW is also disposed directly at the E/RRF. Table 6-12 presents the amounts of county wastes received at the I-66 Transfer Station and E/RRF from 2000 to 2002.

Table 6-12. MSW Disposal Destination Amounts in Fairfax County, 2000–2002, tons

Year	MSW Handled at Transfer Station	MSW Sent Directly to E/RRF
2000	609,993	123,983
2001	672,824	157,997
2002	663,819	189,761

**Fairfax County projects annual volumes of MSW handled at the I-66 Transfer Station (excluding yard waste and special wastes) will increase between 10 and 58 percent from 2004 and 2025, assuming continuation of current waste management practices**

### Assessment of Current and Future Transfer Needs

Chapter 2 of this report presents the projected quantities of MSW generated, recycled, and disposed in Fairfax County over the SWMP planning period. The county developed four alternative MSW projections to address the probable range of variance in the future generation rates.

Future projections of MSW handled at the I-66 Transfer Station are dependent on three factors: (1) the percent of MSW recycled; (2) the projected amounts of MSW destined for disposal; and, (3) the percentage of those amounts sent directly to the E/RRF. Projected amounts of MSW destined for disposal over the SWMP planning period are presented in Chapter 2.

Historically, approximately 20 percent of MSW destined for disposal in Fairfax County went directly to the E/RRF. The county expects this percentage to remain constant in the future, as long as the E/RRF continues as the primary MSW disposal method. Note that, for calculating projections, this percentage only applies to county MSW amounts up to the capacity of the E/RRF (approximately 1,095,000 tons annually). All MSW in excess of the E/RRF capacity will be handled directly by the I-66 Transfer Station or a future transfer facility at the I-95 Complex.

Table 6-13 and Figure 6-4 show the projected quantities of MSW managed at transfer facilities in the county over the SWMP planning period for the four projection alternatives. **(Note that these projections assume the continuation of the county's current management practices and conditions.)** The county projects that annual quantities of MSW managed at transfer facilities in Fairfax County will increase between 10 and 58 percent from 2004 to 2025.